REMARKS

Claims 1-92 are pending. Claims 1-18, 23-29, 34, and 40-92 are withdrawn, and thus claims 19-22, 30-33, and 35-39 are rejected.

Entry of this amendment is proper, because it will clarify the issues on appeal.

Claim 19 is the sole independent claim at issue. It recites a pharmaceutical composition comprising a radiolabeled pharmaceutical agent of the formula (II):

$$RI-C_h-L_n-(BM)_x$$
; and

an effective stabilizing amount of a compound of formula (I):

$$\begin{array}{c|c}
E^1 & A^1 \\
A^5 & A^3
\end{array}$$

The claim defines the components and states "provided the compound of formula (I) is not (1) a substituted monohydroxyl aromatic compound; (2) a substituted dihydroxyl aromatic compound, in which the two hydroxyl groups are not adjacent to each other; (3) a substituted monohydroxyl-monoamino aromatic compound, in which the hydroxyl group and amino group are not adjacent to each other; or (4) an ortho, meta, or para aminobenzioc acid."

Improper Double Patenting Rejection

The Office Action rejects the claims of the present pending application over claims 22, and 28-30 of U.S. Patent No. 6,537,520 (the '520 patent). The Examiner asserts that the present invention is an obvious variant of the claims, even though no compounds of Formula I are taught or suggested. The Office Action supplies two other references, but as will be

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discussed below, a prima facie case of obviousness has not been shown, and therefore the

rejection is improper.

No Prima Facie Case of Obviousness Established

The Office Action rejects claims 19-22, 30-33, and 35-39 under 35 USC 103(a) as

being obvious over the '520 patent, in view of U.S. Patent No. 5,679,318 (the '318 patent) and

the abstract to JP 56144060 to Nippon Oils and Fats Co. (the Nippon reference). The

Examiner is respectfully requested to provide an English translation of the full Nippon

reference.

The Office Action also rejects claims 19-22, 30-33, and 35-39 under 35 USC 103(a)

as being obvious over U.S. Patent No. 5,750,088 (the '088 patent) or U.S. Patent No.

5,707,603 (the '603 patent), in view of the '318 patent and the Nippon reference.

The Examiner has impermissibly boiled the invention down to a gist, namely, that the

invention is adding an antioxidant to a radiopharmaceutical. Obviously, those in the art knew

the importance of antioxidants. For example, the '520 patent states that its compositions can

include a reducing agent. The '520 patent states "Reducing agents useful in the preparation of

radiopharmaceuticals and in diagnostic kits useful for the preparation of said

radiopharmaceuticals include but are not limited to stannous chloride, stannous fluoride,

formamidine sulfinic acid, ascorbic acid, cysteine, phosphines, and cuprous or ferrous salts."

(col. 34, lines 46-52; emphasis added). Still, the Examiner has not alleged that the listed

reducing agents teach or suggest Claim 19's Formula I.

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The '088 patent also includes ascorbic acid as a reducing agent. See col. 23, lines 30-

36. The Examiner has not alleged that the listed reducing agents teach or suggest Claim 19's

Formula I.

The Examiner alleges that the '318 patent teaches antioxidants for ⁹⁰Y, but again the

Examiner has not alleged that any of the antioxidants are included in Claim 19's Formula I.

Thus, a survey of the above radiopharmaceutical-related patents failed to find any

antioxidants included in the present application's Formula I of Claim 19.

Nonetheless, the Examiner appears to pick and choose from the abstract of a

nonanalogous reference and present a rejection based on a combination of references. As

will be seen, the Nippon reference cannot be used to establish a prima facie case here.

The Nippon Reference Is Nonanalogous Art

Based on the Abstract, the reference relates to an "[a]ntioxidant for feed use," more

specifically, the assignee, Nippon Oils & Fats Co., has found a synergistic combination of

ascorbic acid and gallic acid (a trihydroxybenzoic acid) which prevents oxidation "of the oil

and fat in feed." No disclosure points toward use with radiolabeled pharmaceutical agents.

Upon information and belief, the oxidation of fats and oils in feed renders the feed less

palatable to cattle, swine, and the like - thus causing reduced consumption and hence,

reduced weight gain. Thus, not even a similar problem is solved. Applicants submit that this

development is not something that a person of skill in the pharmaceutical art should be

imputed to be aware of.

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The Nippon Reference Cannot Be Combined With The Other References

In response, the Examiner states "An [sic] known antioxidant would have been reasonably expected to function as [sic] antioxidant in any composition." Applicants strongly

disagree.

First, the fact that something can be ingested as a feed is hardly evidence that it will

function well when parenterally administered as a radiolabeled pharmaceutical agent.

Second, not all antioxidants work equally well in pharmaceuticals. For example, the

Background section of the '603 patent explains that choosing the identity of the antioxidant

is critical:

Another problem with some prior art compositions is that the chelator must be activated by a reducing agent before forming the radionuclide chelate. If the protein conjugates are to be formed prior to formation of the radionuclide chelate, then the reducing agent employed for activating the complexing agent can degrade the

protein.

Thus, the references of record strongly rebut the implication that antioxidants are

interchangeable.

Furthermore, the Office Action has provided no evidence to support the

contention that replacing gentisic acid with gallic acid is "a selection from amongst

equally suitable material." To the contrary, the evidence shows that it is not, or the Office

Action would not have had to resort to a reference that is so far afield.

The Nippon Reference Cannot Be Modified to Meet the Claim Limitations

Even if the Nippon reference could be relied on, the combination of references fails to

teach the claimed invention.

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As noted above, the Nippon reference discloses a synergistic combination of ascorbic

acid and gallic acid (a trihydroxybenzoic acid) which prevents oxidation "of the oil and fat in

feed." We know that it is a synergistic combination, because the Abstract states "the

antioxidising activity of gallic acid is synergically intensified. Oxidn. of the oil and fat in

feed, can be prevented."

No teaching of the Nippon reference implies ascorbic acid is optional, in fact, it is

necessary to exhibit synergism. Thus, the Nippon reference is limited to combinations

including ascorbic acid, because the reference's touting of synergism teaches away from

modification in this regard. In contrast, the Applicants do not claim ascorbic acid in their

independent claim. Therefore, the claims patentably define over the references.

Thus, taking the references as a whole, the combination of references is improper.

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Applicants are concerned that the combination of references is due to an impermissible

amount of hindsight.

Applicants submit that the claims are in condition for allowance.

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